

**A** *udit*

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INDUSTRIAL PRIME VENDOR PROGRAM AT THE  
NAVAL AVIATION DEPOT - NORTH ISLAND

Report No. D-2001-072

March 5, 2001

Office of the Inspector General  
Department of Defense

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### **Acronyms**

DLA	Defense Logistics Agency
DSCP	Defense Supply Center Philadelphia
DSCR	Defense Supply Center Richmond
DVD	Direct Vendor Delivery
EA	Each
FAR	Federal Acquisition Regulation
HD	Hundred
IPV	Industrial Prime Vendor
MAUC	Mean Acquisition Unit Cost
NADEP	Naval Aviation Depot
NSN	National Stock Number
SUP	Standard Unit Price



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-2885

March 5, 2001

MEMORANDUM FOR DIRECTOR, DEFENSE LOGISTICS AGENCY

SUBJECT: Audit Report on the Industrial Prime Vendor Program at the Naval Aviation Depot – North Island (Report No. D-2001-072)

We are providing this audit report for information and use. We considered management comments on a draft of this report when preparing the final report.

The Defense Logistics Agency comments conformed to the requirements of DoD Directive 7650.3: therefore, additional comments are not required.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. Terry L. McKinney at (703) 604-9288 (DSN 664-9288) or Mr. Henry F. Kleinknecht at (703) 604-9324 (DSN 664-9324). See Appendix D for the report distribution. The audit team members are listed inside the back cover.

A handwritten signature in black ink, reading "Thomas F. Gimble", is positioned above the printed name.

Thomas F. Gimble  
Acting  
Deputy Assistant Inspector General  
for Auditing

## **Office of the Inspector General, DoD**

**Report No. D-2001-072**

(Project No. D1999CF-0104)

**March 5, 2001**

### **Industrial Prime Vendor Program at the Naval Aviation Depot – North Island**

#### **Executive Summary**

**Introduction.** This report is one in a series involving the pricing of commercial and noncommercial spare parts and other logistics support initiatives. This report addresses bench-stock material (screws, bolts, rivets, etc.) and logistics support procured from Raytheon E-Systems Incorporated under the industrial prime vendor program to support the Naval Aviation Depot, North Island, California. Additional audits will address the industrial prime vendor program at the Naval Aviation Depot, Cherry Point, North Carolina and the Air Force Air Logistics Centers. The Defense Supply Center Philadelphia initiated the industrial prime vendor program in July 1998 as a test or demonstration program to explore innovative logistics solutions for providing spare parts used in maintenance, repair and overhaul facilities. The conceptual goal of the industrial prime vendor program was to improve logistics support to the service depot maintenance facilities at a lower cost by streamlining the logistics pipeline. The industrial prime vendor program is a customer oriented supply chain management initiative that turns complete responsibility of bench-stock material over to a third-party vendor. The primary customers covered under the demonstration program are Navy depots and Air Force logistics centers. FY 2001 budget figures show overall bench-stock sales at about \$284 million, which includes the industrial prime vendor bench-stock sales at about \$38 million.

The Defense Supply Center Philadelphia awarded industrial prime vendor contract (SP0500-98-D-BP01) to Raytheon on July 8, 1998 to support North Island. The contract has an estimated material value of \$4 million annually with approximately \$750,000 in annual distribution costs. For the last 6 months of CY 1999 when the program was fully operational, program sales totaled \$739,309. Raytheon is responsible for purchasing bench stock and maintaining the stock bins. Raytheon uses direct vendor delivery contracts with a core team of subcontractors to obtain the material.

**Objective.** The primary audit objective was to determine whether the Defense Supply Center Philadelphia industrial prime vendor program had demonstrated an effective shift to commercial, industrial-base resources as an integrated logistics solution to obtain bench-stock material and add value for its customers.

**Results.** The Defense Supply Center Philadelphia industrial prime vendor program at North Island had not demonstrated an effective shift to commercial, industrial-base

resources as an integrated logistics solution. The program had not reduced total logistics costs, improved financial accountability, streamlined the Defense infrastructure, or added value to the Defense supply system. In addition, other areas such as benefits from competition and participation by small businesses needed to be fully addressed. We calculated that the industrial prime vendor program cost an additional \$287,852 to operate for the last 6 months of CY 1999, when the program was fully operational. We also determined that because of unit of issue problems when placing items on contract, North Island was over-billed by \$572,302 from contract inception to March 2000. Total program sales (corrected) during the period were about \$1.6 million. In August 2000, Raytheon provided North Island a check for \$368,375 to partially cover the over-billed amount. In addition, 64 percent (dollars) and 82 percent (line items) of the material supplied on the contract came from the Defense supply system. For details of the audit results, see the Finding section of the report.

**Summary of Recommendations.** We recommend that the Commander Defense Supply Center Philadelphia review actual parts usage and correct pricing errors before items are placed on contract. The supply center should also use appropriate cost recovery rates to place items on contract and for program evaluation purposes and establish metrics to compare prices. The supply center should refund North Island the total amount over-billed. The supply center should establish program metrics for bench-stock material that set goals and closely monitors the number of transactions supplied from the depot system and industry, establish milestones to attain the metrics, and if unable to achieve the established metrics, discontinue the program. The supply center should also develop a plan, establish metrics, and demonstrate how the bulk of its customers will be supported. The supply center should also monitor the program impact on competition and small business. We recommend that the Director, Defense Logistics Agency evaluate program metrics and milestones and determine whether program goals can be attained and whether the program should be continued.

**Management Comments.** The Defense Supply Center agreed to review actual parts usage and correct pricing errors before items were place on contract. The supply center agreed to use appropriate cost recovery rates to place items on contract and for program evaluation purposes and to establish metrics to compare prices. The supply center agreed to refund North Island the total amount over-billed. The supply center agreed to develop a plan and establish program metrics for bench-stock material that set appropriate goals and to closely monitor the number of transactions supplied from the depot system, and industry. The supply center agreed to develop a plan, metrics, and demonstrate how the bulk of its customers would be supported. The supply center also agreed to monitor the program impact on competition and small business. The Defense Logistics Agency agreed to evaluate program metrics and milestones within the next 12 months and determine whether program goals can be attained and whether the program should be continued. See the Management Comments section for the complete text of management comments.

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## Background

**Spare Parts Audits.** This report is one in a series involving prices paid for commercial and noncommercial spare parts. This report addresses bench-stock material and logistics support procured from Raytheon E-Systems Incorporated under the Industrial Prime Vendor (IPV) program. Table 1 shows the items included in bench-stock material and the Federal Supply Class (FSC).

<b>Table 1. Bench Stock Material and Federal Supply Class</b>	
<u>Material</u>	<u>FSC</u>
Gaskets and packing	5330, 5331
Nuts and washers	5310
Screws, bolts, and studs	5305, 5306, 5307
Nails, pins, and rivets	5315, 5320, 5325

**Demonstration Program.** The Defense Supply Center Philadelphia (DSCP) initiated the IPV program in July 1998 as a test program to explore innovative logistics solutions for providing maintenance, repair and overhaul facilities with spare parts. The conceptual goal of the IPV program was to improve logistics support to service depot maintenance facilities at lower costs by streamlining the logistics pipeline. A justification for other than full and open competition was approved and a limited number of site-specific contracts were awarded for proof of concept. The program was designed for a 5-year test period. During the 2-year contract base period, material management responsibility was expected to migrate from the Government to the contractor's full responsibility within 3 years. As performance progressed on initial contracts, metrics would be gathered to assess the impact of total logistics costs and readiness posture at specific sites.

DLA is maintaining its logistics support system concurrent with the new system as a backup logistics system. Once the new logistics systems have been fully tested and determined successful, performance metrics will be refined and the program will be converted to a fully competitive acquisition environment targeting consolidated requirements based on common missions and/or weapon system. At that time, the concurrent systems would become redundant and require functional adjustments. DSCP awarded a number of IPV contracts to various contractors to support Defense depots throughout the world. This report addresses only the Raytheon Naval Aviation Depot – North Island, (North Island), California, IPV contract. Additional audit reports will assess the IPV program at other sites.

DSCP awarded the North Island IPV contract (SP0500-98-D-BP01) to Raytheon on July 8, 1998. The contract was valued at about \$4 million annually, with approximately \$750,000 in annual distribution (infrastructure) costs. Raytheon purchased bench stock to maintain stock bins at or near where depot maintenance

actions were performed. Raytheon negotiated direct vendor delivery contracts with various companies to supply items directly to North Island. In the event that Raytheon could not economically purchase an item, contract clauses authorized Raytheon to supply the material from DLA stock. Raytheon did not earn profit on materials supplied from DLA stock. The IPV program was designed to provide benefits for DoD and direct benefits to the warfighters. Table 2 shows the intended IPV program benefits.

<b>Table 2. Intended IPV Program Benefits</b>	
<u>Reduced</u>	<u>Increased</u>
Logistics response time	Readiness
Customer material costs	Financial accountability
Transactions	Rapid response
Inventory investment	Material availability
Storage, handling, and transportation costs	Opportunities for infrastructure streamlining

**Section 912 Report.** Section 912(c) of the FY 1998 National Defense Authorization Act directed the Secretary of Defense to submit to Congress an implementation plan to streamline acquisition organizations, workforce, and infrastructure. In response, the Secretary of Defense prepared a report to Congress, "Actions to Accelerate the Movement to the New Workforce Vision," April 1, 1998. The report included a section that addressed prime vendor contracts.

**Greatly Expanded Prime Vendor and Virtual Prime Vendor.** As a result of the revolutions in the marketplace - in terms of transportation, manufacturing, and technology - it is no longer necessary for DoD to manage supplies. What DoD needs to do is manage suppliers through programs such as Prime Vendor; and where Prime Vendor is not a commercial practice in a particular sector, create a Virtual Prime Vendor which accomplishes the same outcome through the use of technology. This initiative will reduce the number of personnel and the amount of infrastructure we need to support our warfighters. It will also improve delivery of products and services, but will require the acquisition of new skills by our existing workforce.

## Objective

The primary audit objective was to determine whether the Defense Supply Center Philadelphia industrial prime vendor program had demonstrated an effective shift to commercial, industrial-base resources as an integrated logistics solution to obtain bench-stock material and add value for its customers. See Appendix A for a discussion of the audit scope and methodology, and Appendix B for a summary of prior coverage related to the audit objectives.



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## Industrial Prime Vendor Contract – North Island

The DSCP IPV contract with Raytheon had not demonstrated an effective shift to commercial, industrial-base resources as an integrated logistics solution to provide bench-stock material for the Naval Aviation Depot – North Island. This shift had not occurred because the DSCP IPV program at North Island:

- placed insufficient material on contract within reasonable cost goals, in fact, 64 percent (dollars) and 82 percent (line items) of the material supplied by Raytheon came from the DLA supply system;
- did not differentiate between units of issue, which caused erroneous pricing; and
- did not institute a solution that effectively reduced the DLA supply system infrastructure and depot operations costs.

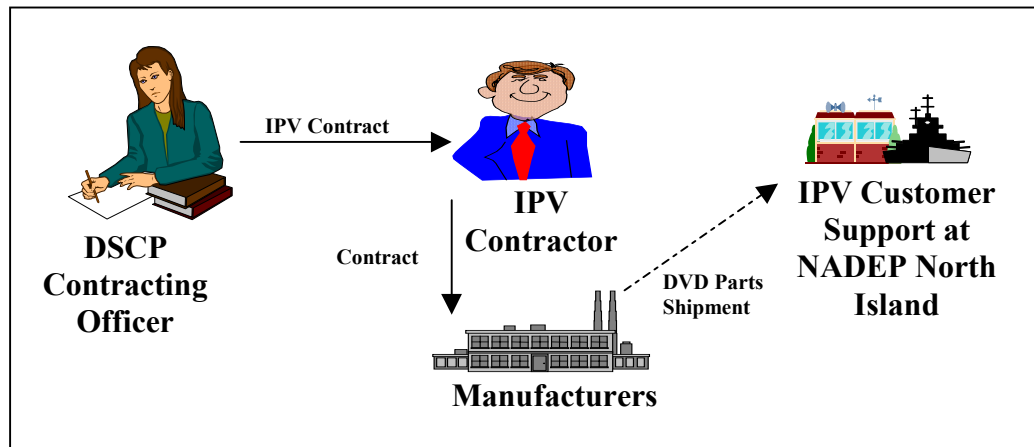
Other areas such as benefits from competition and participation by small businesses may not have been maximized in regard to the program. As a result, the IPV program at North Island had not achieved the desired goals and benefits. We calculated that the IPV program cost North Island an additional \$287,852 or 14 percent more than conventional support for the last 6 months of CY 1999 when the program was fully operational. We also determined that because of the unit of issue problems, North Island was erroneously charged \$572,302 from contract inception through March 2000. Total related billings for the period were about \$1.6 million. On July 25, 2000, Raytheon paid North Island \$368,375 to compensate for erroneous charges.

## Industrial-Base Resources

**Streamlining the Logistics Pipeline.** The DSCP IPV contract with Raytheon had not demonstrated an effective shift to commercial, industrial-base resources as an integrated logistics solution to provide bench-stock material for North Island. This situation occurred primarily because Raytheon was unable to obtain bench-stock material as economically as DSCP. DSCP designed the IPV program to streamline the logistics pipeline by transferring procurement and logistics support requirements for bench stock material from DSCP to Raytheon. Raytheon was responsible for ordering, purchasing, receiving, stocking, and billing bench stock material. Raytheon's purchasing departments and on-site employees at North Island accomplished these contract requirements. In fact, Raytheon hired previously employed North Island contract workers to place orders, receive material, and fill bins. The IPV concept called for Raytheon to serve as an integrator and establish contracts with manufacturers that would ship the parts directly to North Island (direct vendor delivery [DVD]). DSCP believed that Raytheon could supply parts more efficiently and effectively by taking advantage of the commercial supply chain as compared to the DLA supply system. DSCP touted the IPV program as a model for DoD procurement and logistics support.

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Figure 1 shows the DSCP purchasing model for the IPV program.



**Figure 1. DSCP Model for the IPV program**

**Concept for Placing Material on IPV Contract at Economical Prices.** The basic concept for placing material on the IPV contract at economical prices was that Raytheon's unit prices for parts supplied through the commercial supply chain needed to be within 80 percent of the DLA standard unit price (SUP). The SUP is the price DLA charged its customers. The SUP was derived from the mean acquisition unit cost (MAUC) or the actual price DLA paid for items and included the cost recovery rate charged by the supply center responsible for managing the item. The cost recovery rate recouped supply center operations costs, depot costs, corporate and other miscellaneous costs. For example, if DSCP purchased an item for \$100 (the MAUC) and its cost recovery rate was 40 percent, the DLA customer price for the item was \$140 (the SUP).

**Reasonable Cost Goal.** Raytheon basically needed to obtain the item for no more than 80 percent of the SUP for an item to be included on the IPV contract within a reasonable cost goal. Raytheon added a 6 percent profit on all material provided through the commercial supply chain and also charged a \$750,000 fixed amount for annual infrastructure costs. DSCP then added a 5.7 percent special cost recovery rate for the IPV program. In theory, if sufficient items had been included on the IPV contract, Raytheon's profit and infrastructure costs, and the DSCP surcharge, would have been offset by the 20 percent difference from the DLA SUP. If the items had been included on contract at prices higher than 80 percent of the SUP, the IPV program would have cost more than if the items were provided from the DLA supply system.

**Market Basket Contract Approach.** DSCP included "market baskets" or groups of items on the IPV contract. The market basket approach meant that some items could be higher than 80 percent of the SUP while others were lower; but cumulatively, the total costs did not exceed 80 percent of the SUP. Raytheon submitted groups of items (with expected demand quantities) to DSCP for

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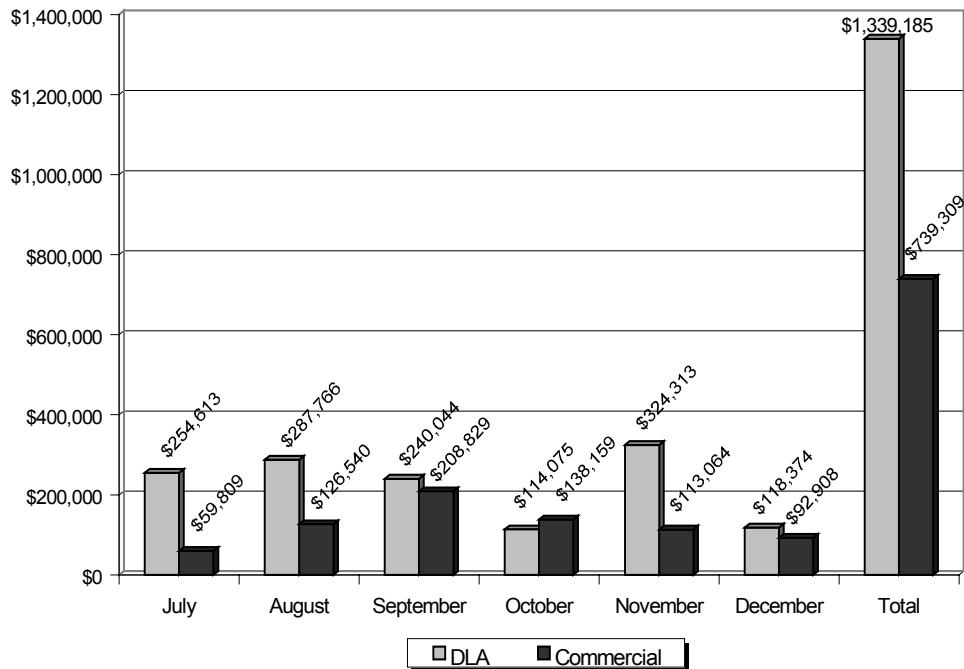
approval. DSCP added items to the contract without regard to individual unit prices if the market baskets met the 80 percent criteria. Raytheon used the DLA supply systems for those items that were not procurable within the 80 percent SUP threshold or caused the market basket to exceed 80 percent without earning a profit.

**Available Part Compliance Rate.** The IPV contract was also designed to increase the availability of parts. However, parts were readily available before the IPV program was instituted. North Island had a parts availability compliance rate of 98.3 percent in CY 1997 and 98.7 percent for the first 6 months of 1998 (before the IPV program). Raytheon had a 99.3 percent parts availability compliance rate from July 1999 (fully operational) through February 2000. However, the Raytheon compliance rate only related to about 20 percent of the bins. For example, in October 1999, there were 14,258 bins on the IPV contract at North Island. Raytheon supplied the material for only about 20 percent of the bins and 107 of the Raytheon bins were empty. Consequently, the compliance rate for October 1999 was 96.2 percent. From July 1998 through June 1999, North Island and Raytheon were responsible for parts availability and the compliance rate was 97.9 percent.

## **Material on the IPV Contract**

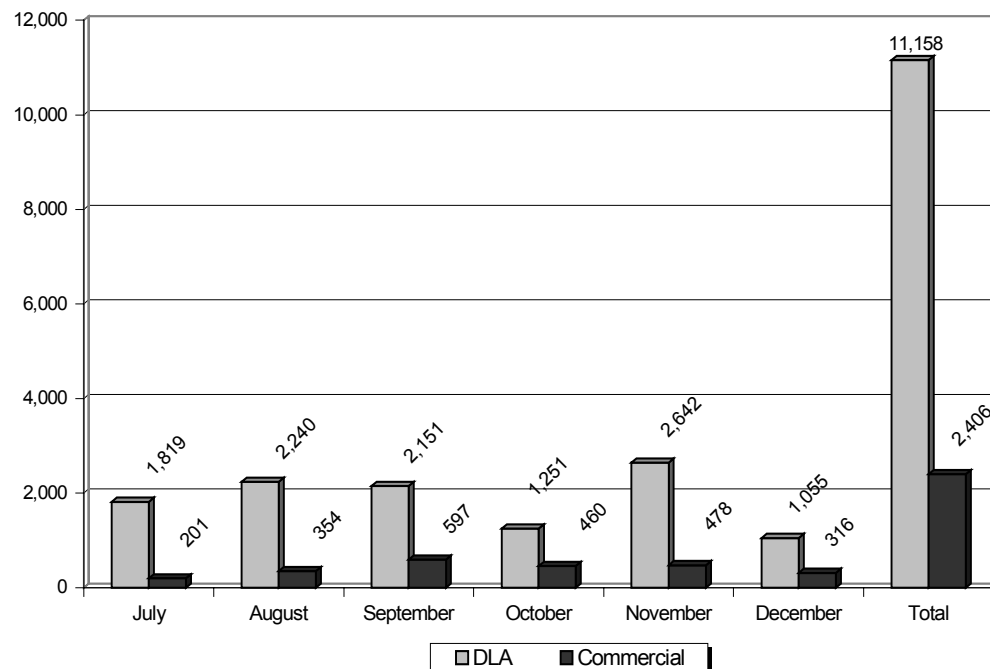
**Placing Material on the IPV Contract.** DSCP placed insufficient material on the IPV contract within reasonable cost goals for the program to be successful. In fact, 64 percent (dollars) and 82 percent (line items) of the material supplied by Raytheon came from the DLA supply system because the contractor could not meet cost goals established by DSCP for the IPV program. In addition, DSCP did not verify the integrity of market basket quantities, unit prices, and units of issue to ensure that the items priced in market baskets were correct. As a result, there were numerous cases of items on contract that were erroneously priced.

Figure 2 shows that from July through December 1999, IPV commercial sales (items the contractor was able to procure and supply DVD) were significantly less than the value of the items still being supplied by the DLA supply system. Total commercial sales were 36 percent of the total dollars while DLA sales (items obtained from the DLA supply system) were 64 percent.



**Figure 2. Most IPV Sales (dollars) are from the DLA Supply System**

Similarly, Figure 3 shows that the split between IPV contractor and DLA supply system for material line items or transactions was even greater. Only 18 percent of the IPV transactions represented commercial sales while 82 percent represented DLA sales.



**Figure 3. Most IPV Sales (transactions) are from the DLA Supply System**

As long as Raytheon obtains most of its items from DLA stock (82 percent), the IPV program cannot achieve its key goals of reducing the number of depot transactions and the DLA supply system infrastructure.

**IPV Program Costs.** For the last 6 months of CY 1999, we calculated that the IPV program cost North Island an additional \$287,852 or 14 percent more when compared to traditional DLA support. In fact, for the items that were procured through the commercial supply chain, the price for those items actually equaled 87.4 percent of the DLA FY 1999 SUP because of problems with the market basket analyses performed by DSCP. We calculated the additional program costs using the same methodology used in business case analysis by DSCP to support implementing the IPV program. For example, in July 1999, when the cost of material supplied under the IVP program (Raytheon) was compared to the cost for the same material supplied through the DLA supply system (North Island), the IPV program cost North Island an additional \$44,757.

Figure 4, the July 1999 comparison, is an example of the methodology used to determine additional costs or IPV program “loss” to North Island. The figure shows that the IPV contractor provided only 201 items or about 10 percent from commercial sources while 1,819 items were supplied from the Defense supply system. This is the basic methodology used by DSCP and North Island to evaluate the effectiveness of the program.

<u>Raytheon</u>		<u>North Island/DLA</u>	
Material cost	\$314,422	Material cost (SUP)	\$322,999
Profit (.06)	3,589	Infrastructure	35,000
DLA (.057)	6,846		
<b>Subtotal</b>	<b>324,857</b>	<b>Total</b>	<b>\$357,999</b>
Infrastructure	56,706	SAMMS = \$254,613 (1,819 items)	
<b>Subtotal</b>	<b>381,563</b>	Commercial = 59,809 (201 items)	
Oversight	21,193	Commercial @ SUP price =	
		\$68,386	
<b>Total</b>	<b>\$402,756</b>	87% SUP	
		Loss = \$44,757	

**Figure 4. July 1999 Market Basket Comparison**

**Market Basket Problems.** DSCP failed to verify the integrity of quantities listed in the market baskets proposed by Raytheon. DSCP relied on planned quantities to set item prices on contract to the 80 percent SUP criteria, but the actual usage did not accurately reflect planned usage by North Island. For example, there were 5,161 commercial items priced on the North Island IPV contract as of May 2000. The average price (for the 5,161 items) was actually less than 80 percent of the DLA SUP (79.8 percent of the FY 1999 SUP and 72.8 of the FY 2000 SUP). Therefore, DSCP believed the IPV program would result in lower costs. However, there were problems with unit prices and units of issue in the market baskets used to place items on contract. In addition, Raytheon billed North Island for only 1,229 items valued at \$1.3 million from July 1999 through March 2000. We excluded four items because of questionable data. The remaining 1,225 items were priced at 87.4 percent of the FY 1999 SUP and 78.1 percent in FY 2000 SUP. As a result, in CY 1999, IPV program costs were higher than expected. DSCP needs to do periodic reviews to determine whether parts usage established during contract pricing agrees with actual usage when using market baskets.

In March 2000, Raytheon submitted a new market basket of 1,000 items priced at 74.1 percent of the SUP. DSCP stated to North Island and DoD, Inspector General, that the modification would help increase commercial sales and lower the IPV management rate. We reviewed the group of items and determined that the proposed prices were seriously flawed because of decimal point errors and unit of issue problems. After making appropriate corrections, we calculated that

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the items were actually priced at 91 percent of the DLA FY 1999 SUP. As a result, DSCP could only approve a group of 491 items that equaled 66.1 percent of the FY 1999 SUP. The same errors were found after further reviews of contract modification P00020, dated March 31, 2000. The 491 approved items included unit of issue problems and significant pricing errors from one of the vendors (decimal point) that favored DSCP. However, Raytheon was willing to accept any monetary loss to get the items on contract. Pricing items incorrectly only leads to further problems for the IPV program. DSCP needs to have Raytheon correct pricing errors before a determination is made to include items on the IPV contract. The program should also be evaluated on accurate data not erroneous data that tends to show a more favorable light.

**Changes in the DSCP Cost Recovery Rate for Bench-Stock Material.** During FY 1999, the DSCP cost recovery rate for bench-stock material ranged from 38.0 percent for gaskets and packing to 42.3 percent for nuts and washers and averaged about 40 percent. When decisions were made to place items on the IPV contract, DSCP compared the proposed prices from the IPV contractor to the DLA FY 1999 SUP or sell price, which included the cost for material and the applicable cost recovery rate. However, in FY 2000, DSCP established a separate cost recovery rate for bench-stock items. The new DSCP rate was significantly higher, 57.2 percent, than the DSCP overall cost recovery rate of 39.8 percent. The FY 2001 cost recovery rate for bench stock was even higher, 74.9 percent, while the overall DSCP cost recovery rate was 40.5 percent. The higher rates enabled Raytheon to purchase items at higher prices and include them on the contract; thereby, lowering the management rate and making the IPV program appear successful. We reviewed the various cost elements of the bench-stock cost recovery rates for FYs 2000 and 2001 and determined that the rates did not accurately reflect the costs associated with DSCP managing bench-stock material. In addition, the true IPV surcharge was understated.

Tables 3 and 4 show that if costs not directly associated with bench stock material are removed, and if the IPV program was discontinued, the cost recovery rates for bench stock material would be 45.3 for FY 2000 and 49.4 percent for FY 2001. Table 4 shows IPV program sales at \$38 million of total sales (about 13.4 percent) with traditional sales at \$245.83 million.

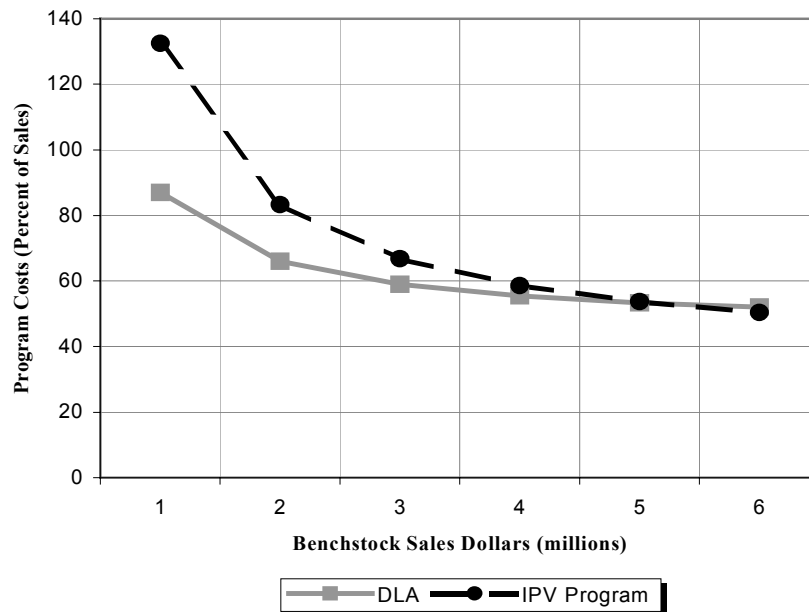
<b>Table 3. DSCP FY 2000 Cost Recovery Rates (millions)</b>					
<u>Cost Elements</u>	<u>Overall</u>	<u>Bench Stock</u>	<u>IPV</u>	<u>Adjusted*</u> <u>Bench Stock</u>	<u>Bench Stock And IPV</u>
ICP operations	\$98.04	\$ 30.90	\$ 7.04	\$30.90	\$ 37.94
Depot operations	133.60	65.00	0.00	53.00	53.00
Corporate	27.09	12.53	0.00	12.50	12.50
Material related	44.51	16.32	0.00	16.32	16.32
Other/inflation	4.93	18.79	(5.89)	2.87	2.87
<b>Total costs</b>	<b>\$308.17</b>	<b>\$143.54</b>	<b>\$ 1.15</b>	<b>\$115.59</b>	<b>\$122.63</b>
Sales	\$776.60	\$250.90	\$20.00	\$250.90	\$270.90
Cost Recovery Rates	39.7%	57.2%	5.7%	46.1%	45.3%
*Includes Depot operations and other nonbench stock related adjustments.					

<b>Table 4. DSCP FY 2001 Cost Recovery Rates (millions)</b>					
<u>Cost Elements</u>	<u>Overall</u>	<u>Bench Stock</u>	<u>IPV</u>	<u>Adjusted*</u> <u>Bench Stock</u>	<u>Bench Stock and IPV</u>
ICP operations	\$112.63	\$ 38.94	\$4.82	\$ 38.94	\$ 43.76
Depot operations	110.00	57.26	0.00	57.26	57.26
Corporate	107.27	56.68	0.00	22.56	22.56
Material related	30.93	12.10	0.00	12.10	12.10
Other/inflation	12.74	19.18	(2.64)	4.49	4.65
<b>Total costs</b>	<b>\$373.57</b>	<b>\$184.16</b>	<b>\$2.18</b>	<b>\$135.35</b>	<b>\$140.33</b>
Sales	\$923.00	\$245.83	\$38.00	\$245.83	\$283.83
Cost Recovery Rates	40.5%	74.9%	5.7%	55.1%	49.4%
*Includes Defense Reutilization and Marketing Service and other nonbench stock adjustments.					

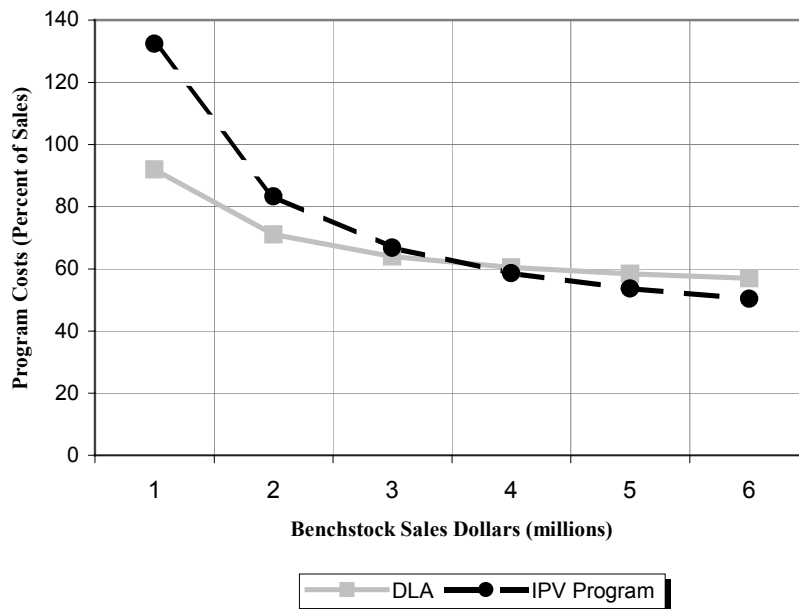


**IPV Program Breakeven Points.** Using the 80 percent SUP criteria, we compared IPV sales ranging from a low end of \$1 million to a high end of \$6 million annually using two different DSCP cost recovery rates to determine IPV program breakeven points when compared to the traditional DLA supply system. As shown in tables 3 and 4, the DSCP cost recovery rate for bench-stock material falls somewhere from 45.3 to 49.4 percent. For the comparison, we used DSCP cost recovery rates of 45 and 50 percent and used 80 percent of the SUP as the cost for items placed on the contract. Using 80 percent of the 45 and 50 percent cost recovery rates equates to placing items on the IPV contract at 116 and 120 percent of the DLA MAUC. If the DSCP cost recovery rate for bench stock material is 45 percent, the IPV program will not breakeven until sales reach about \$5 million. If the DSCP cost recovery rate was 50 percent, the IPV program could breakeven or better at 80 percent of SUP when sales reach about \$4 million.

Figure 5, using a cost recovery rate of 45 percent, shows a breakeven point at just above \$5 million. Figure 6, using a cost recovery rate of 50 percent, shows a breakeven point at just before \$4 million in commercial sales. Annual North Island infrastructure costs totaling \$420,000 were included in the DLA costs. These North Island infrastructure costs basically represent the costs for contractor personnel at North Island to manage the bench stock bins that transferred to the IPV contractor.



**Figure 5. IPV Program Costs Exceed DLA Supply System Costs Until Sales Reach \$5 Million (DSCP Cost Recovery Rate is 45 percent)**



**Figure 6. IPV Program Costs Exceed DLA Supply System Costs Until Sales Almost Reach \$4 Million (DSCP Cost Recovery Rate is 50 Percent)**

We calculated that the commercial items cost Raytheon about 19.7 percent more than the DLA FY 1999 MAUC and about 20.8 percent more than the FY 2000 MAUC on the IPV contract. When Raytheon's 6 percent profit and 1.5 percent award fee were added, the prices were 27.2 and 28.3 percent higher than DLA FYs 1999 and 2000 prices for the same items. We believe that establishing a goal for placing items on contract at some percentage higher than the MAUC would be significantly more consistent for evaluating the program than using 80 percent of the SUP.

DSCP needs to use an appropriate cost recovery rate for bench stock material in the 45 to 50 percent range when decisions are made to include items on the contract and for program evaluation purposes.

DSCP needs to establish metrics that compare the DLA MAUC with the IPV contract costs and not include items when the cost exceeds 120 percent of the MAUC.

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## Accounting For Different Units of Issue

The IPV program at North Island did not differentiate between units of issue which caused erroneous pricing when the items were included on the contract. We calculated that North Island was overcharged \$395,352 for the period from July 1999 through March 2000. The total related billings for the period were \$1.3 million. North Island was overcharged because neither DSCP nor Raytheon adequately verified units of issues when pricing items in market baskets. On July 25, 2000, Raytheon paid North Island \$368,375 to partially cover the overcharged amount on invoices from July 1999 to March 2000. We also calculated that North Island was overcharged about \$176,950 on the first three invoices submitted by Raytheon. The total amount billed on the first three invoices was \$269,348. These invoices were difficult to reconcile but DSCP and Raytheon must settle on an appropriate figure and refund North Island for the full amount, including the DSCP surcharge.

Table 5 provides a summary of the erroneous charges and refunds to North Island.

<b>Table 5. Summary of Erroneous Charges and Refunds to North Island</b>						
<u>Invoices</u>	<u>Amount Overcharged</u>			<u>Amount Refunded</u>		
	<u>Contractor</u>	<u>DSCP</u>	<u>Total</u>	<u>Contractor</u>	<u>DSCP</u>	<u>Total</u>
Inception - June 1999	\$167,408	\$ 9,542	\$176,950	\$ 0	\$0	\$ 0
July 1999 – March 2000	374,032	21,320	395,352	368,375	0	368,375
<b>Total</b>	<b>\$541,440</b>	<b>\$30,862</b>	<b>\$572,302</b>	<b>\$368,375</b>	<b>\$0</b>	<b>\$368,375</b>

**Units of Issue.** In the DLA wholesale inventory system, some items were packaged in multiple units of issue, such as hundreds (HD). The common practice at DSCP was to solicit using the HD unit of issue, then convert any quotes received as each (EA) to HD. The conversion was required as some suppliers only supplied the item in the EA unit of issue, and indicated this on their quote. On the North Island contract, 35 items had contract pricing errors when the unit of issue was confused in the material bid and evaluation process. Raytheon's suppliers quoted using their customary EA unit of issue, and in the evaluation process these items were reviewed as having been quoted to the DLA unit of issue (HD or package), when in fact the prices were submitted as each.

Since the error occurred during the quoting process, and DSCP accepted a price in error, Raytheon technically did not overbill the Government. As a result, DSCP did not uncover billing errors because the Raytheon invoice cited the agreed upon contract price. The DSCP invoice analysis was designed to identify prices that did not comply with the contract schedule price. Since the prices complied with the contract schedule, they were not identified in the invoice validation process. Additionally, Raytheon had agreed to perform at the contract price for the items that had been accepted by DSCP.

For example, DLA previously bought close tolerance screws (NSN 5305-01-133-2195) in packages of 25 for \$20.00 and sold them to North Island, individually, for \$1.26 EA including surcharge. Raytheon also purchased the part in packages of 25 but quoted a price of \$22.92 EA that was accepted by DSCP, not accounting for the difference in unit of issue. As a result, North Island was paying \$22.92 each or 18 times more than the correct price of \$1.26 each.

Table 6 shows the impact of erroneously pricing the close tolerance screws.

<b>Table 6. Impact of Erroneously Pricing Close Tolerance Screws (NSN 5305-01-133-2195)</b>							
<u>Description</u>	<u>Quantity Billed</u>	<u>Unit of Issue*</u>	<u>Unit Cost</u>	<u>Total Cost</u>	<u>Profit (6 percent)</u>	<u>DSCP (5.7 percent)</u>	<u>Total Price</u>
Raytheon billing	4,310	Each	\$22.92	\$98,785	\$5,927	\$5,969	\$110,681
Corrected billing	172.4	25	\$22.92	\$ 3,951	\$ 237	\$ 239	\$ 4,427
<b>Amount overbilled</b>				<b>\$94,834</b>	<b>\$5,690</b>	<b>\$5,730</b>	<b>\$106,254</b>
*Both DLA and Raytheon purchased this part in packages of 25.							

DSCP commented that the prices for the problem items were submitted in June 1998. At that time DSCP pricing analysis did not screen prices that were too low or unrealistic. As a result of the audit, DSCP has corrected its pricing analysis procedures to flag low, as well as, high prices. Additionally, DSCP has reset the pricing analysis records for these items to a unit of issue of EA. This is consistent with industry pricing practices and customer usage.

DSCP further commented that Raytheon had also implemented an NSN data management process. The process begins when the customer identifies the NSN, through the solicitation review, and submission to DSCP. This process effectively screens all items so this problem does not recur. Raytheon works with the customer and DSCP to identify required baseline items. By screening site customer databases, comparing DLA unit of issue, and performing reconciliation, the right quantity and unit of issue are agreed to before submission to DSCP for formal placement on the contract. Within this process, any item unit of issue that can be broken into its lowest denominator is converted before being cited in Raytheon's request for quote to its suppliers (for example, 1 HD becomes 100 EA). This process translates the 'Government' unit of issue categorization into a 'commercial' categorization that is compatible with industry convention. These items are then highlighted in the pricing submission to DSCP and show the commercial bid as well as the government data contained within FedLog. In this way, DSCP can readily identify, and sort any necessary items that need translation in the bid evaluation process.

Actions taken by DSCP and Raytheon as a result of the audit should resolve the unit of issue problems that caused items to be erroneously priced.

## DLA Supply System Infrastructure

**IPV Program Impact on Supply System Infrastructure.** The IPV program at North Island has failed to provide an adequate solution to reduce the DLA supply system infrastructure and depot operations costs. In fact, instead of reducing the DLA supply system infrastructure, the IPV program has actually expanded the DLA infrastructure because DSCP, in addition to procuring items on the IPV contract, also has to procure the same items for stock to support other non-IPV customers. While the DSCP demonstration program addressed the need for concurrent systems until proof of the success of direct reliance on industry, the ability of industry to effectively provide bench-stock material to all DLA customers may not be cost effective. Further, even if the demonstration program is successful at the Navy depots and Air Force logistics centers, the majority of the other DLA customers still need support.

Figure 8 shows the impact of the IPV program on the DLA infrastructure, a sharp contrast to the DSCP purchasing model for the IPV program shown in Figure 1.

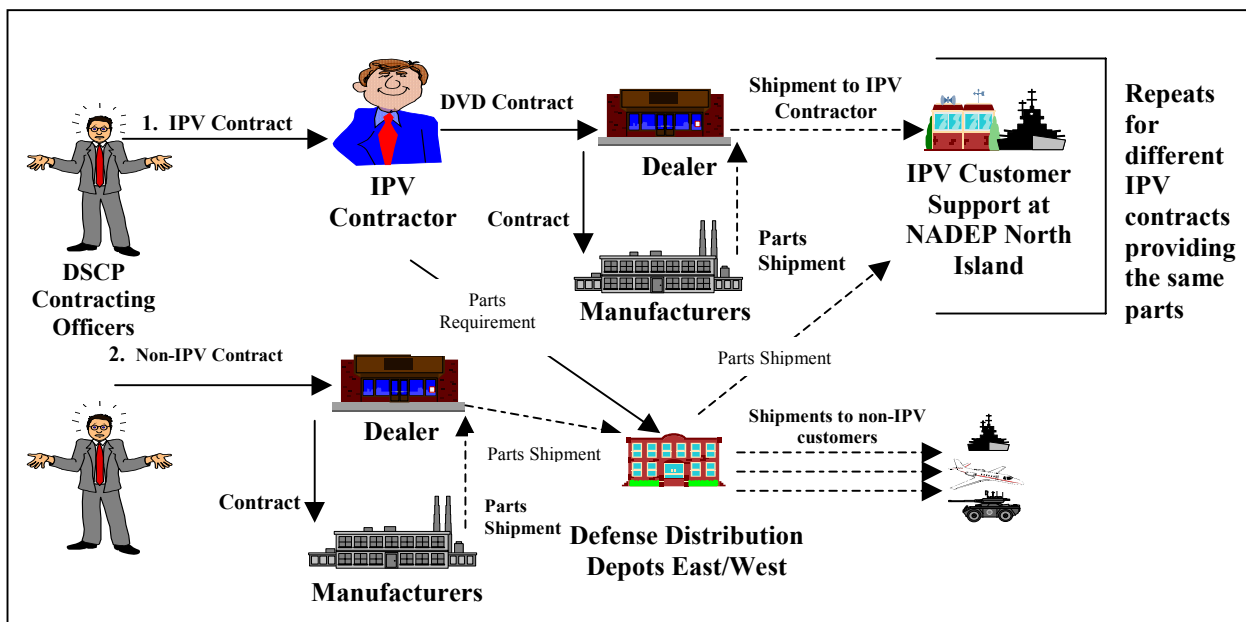
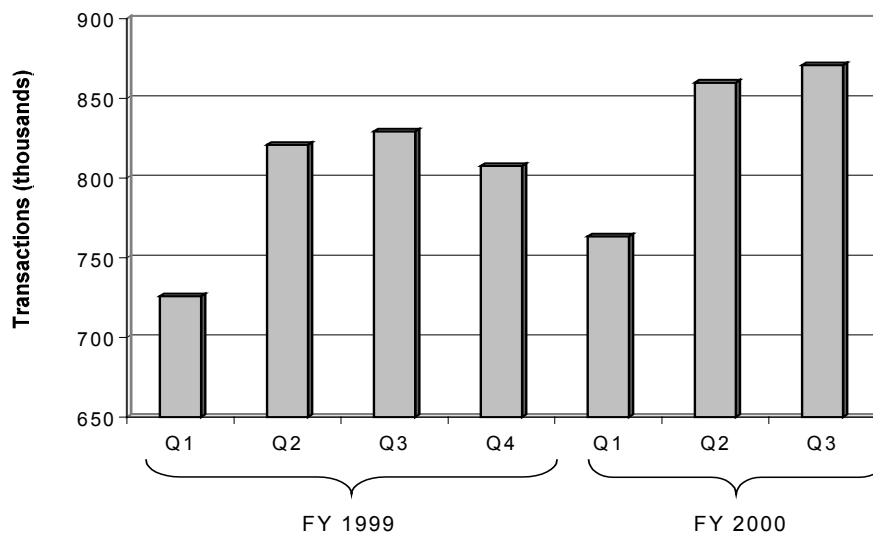


Figure 8. DLA Purchasing Model with IPV Program

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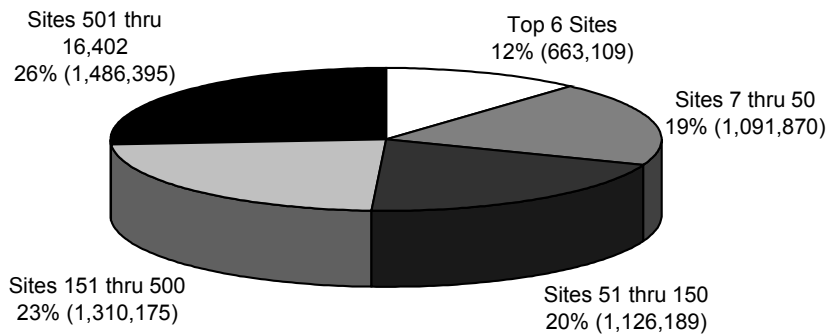
**Depot Operations Costs.** As shown in tables 3 and 4, depot operations represent the highest cost element relating to bench-stock, \$53 million in FY 2000 and \$57.26 million in FY 2001. In theory, reducing the number of transactions at the depot should eventually lead to lower depot operation costs, a key goal of the IPV program. We obtained depot transaction data from the Defense Operations Research and Resource Analysis center relating to bench stock material for FY 1999 and the first three-quarters of FY 2000.

Figure 9 shows depot transactions for bench-stock material trending up in FY 2000 (roughly 800,000 per quarter or about 3.2 million per year).



**Figure 9. Bench Stock Depot Transactions are Trending Up (Roughly 800,000 Per Quarter)**

Figure 10 shows that 16,402 different DLA customers were involved in 5,677,738 bench stock material transactions in FY 1999 and FY 2000 (first 3 quarters). The largest 6 DLA customers for bench-stock material represented only about 12 percent of the transactions (air logistics centers at Tinker, Warner Robbins, and Hill Air Force Bases and Naval aviation depots at Cherry Point, Jacksonville, and San Diego).



**Figure 10. 16,402 Different DLA Customers Requested Bench Stock Material (FY 1999 and FY 2000 (quarters 1-3)) (5,677,738 transactions)**

For the IPV program to be successful, industry must be able to provide the bulk of these transactions as effectively as the DLA supply system. Unfortunately, the IPV contractor at North Island was only able to provide a small percentage of the bench-stock material transactions (18 percent Figure 3). In other words, the IPV program addressed only 12 percent of the depot transactions with minimal success. Until a large portion of the other 5 million transactions are shifted to industry, the depots operating costs will only be slightly affected.

DSCP needs to establish IPV program metrics for bench-stock material. The metrics must show a significant shift in the number of transactions supplied from the DLA depot system to industry, establish time frames to attain the metrics, and if unable to achieve the established metrics, discontinue the program.

DSCP also needs to develop a plan, establish metrics and time frames, and demonstrate how its IPV contractors will support bench stock material for the bulk of its customers and transactions to continue the program.

## **Competition and Small Business**

Although only a demonstration program, the IPV program has not adequately addressed other areas such as the benefits of competition and participation by small businesses. In October 1983, Secretary of Defense (then Senator) William S. Cohen outlined four basic benefits to competitive procurement that still hold true after almost 20 years (Public Contract Law Journal, October 1983, Volume 14, Number 1).

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- Competition in contracting saves money. Studies have indicated that between 15 and 50 percent can be saved through increased competition.
  - Competition curbs cost growth. Competitive procurements have led to improvements in system performance and on-schedule delivery by contractors.
  - Competition may also promote significant innovative and technical changes. In some cases, competition serves as an incentive for firms to be more progressive in developing cost-reducing design changes and improvements in manufacturing technology in order to gain an advantage over their competitors. Increased product quality and reliability are potential benefits of competition, especially when performance and quality are included in the solicitation as production award criteria. A long-term benefit of competition is enhanced mobilization capacity and industry responsiveness.
  - Competition has an inherent appeal of "fair play." Competition maintains integrity in the expenditure of public funds by ensuring that Government contracts are awarded on the basis of merit rather than that of favoritism.

DSCP needs to determine what impact the IPV program will have on competition and determine the extent of competition obtained by the IPV contractor.

Although bundling requirements was not an issue when the IPV contract was awarded, effective July 26, 2000, the Federal Acquisition Regulation provides detailed guidance on bundling requirements. Basically, acquisition bundling consolidates requirements for supplies or services previously performed under separate smaller contracts, into a solicitation for a single contract that is likely to be unsuitable for award to a small business concern for various reasons. See Appendix C for details. Raytheon used a core group of subcontractors to supply parts on the IPV contract. The core group of subcontractors used by Raytheon included Honeywell International (the largest supplier of IPV parts), PB Herndon, Tristar Aerospace, Texas International, Sterling Commerce, and LESCO, all of which are large businesses. We reviewed 1,112 different items bought on the December 1999 contract billing and found that 13 percent (138) of the items bought were previously supplied by 60 different small disadvantaged or woman owned businesses. Under the IPV program, these 60 businesses are now potentially denied the opportunity to supply this material to the Government, which could eventually shrink the size of the Defense industrial base.

DSCP needs to determine the extent of participation by small business, small disadvantaged business, and women-owned small business concerns under the IPV program.

## Summary

The IPV program at North Island has been highly touted as a best commercial business practice—an improved way to manage suppliers and not supplies. We remain skeptical about the role and the effectiveness of DLA as a manager of



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suppliers as opposed to a supply manager. Whether the IPV program is a viable commercial business practice that can be used by DLA to effectively provide better, faster, and cheaper support for bench stock material around the world, around the clock is not close to being demonstrated.

We believe that DLA needs to take a hard look at this program and within the next 12 months determine whether the goals can be achieved.

## **Recommendations, Management Comments, and Audit Response**

### **1. We recommend that the Commander, Defense Supply Center Philadelphia:**

**a. Perform periodic reviews to determine whether parts usage established during contract pricing, agrees with actual usage, when using market baskets.**

**b. Instruct Raytheon to correct pricing errors on proposals before a determination is made to place items on contract.**

**c. Use an appropriate cost recovery rate for bench-stock material in the 45 to 50 percent range when decisions are made to place items on contract and for program evaluation purposes.**

**d. Establish metrics that compare the Defense Logistics Agency mean acquisition unit cost with industrial prime vendor contract costs and not place items on contract if costs exceed 120 percent of the mean acquisition unit cost.**

**e. Obtain a full refund from Raytheon for overcharges and take steps to reimburse North Island for the full amount of the contract overbillings.**

**f. Establish program metrics for bench-stock material that show a significant shift in the number of transactions supplied from its depot system to industry, establish time frames to attain the metrics, and if unable to achieve the established metrics, discontinue the program.**

**g. Develop a plan, establish metrics and time frames, and demonstrate how industry will support bench stock material for the bulk of its customers and transactions to continue the program.**

**h. Determine the impact the program will have on competition and monitor the extent of competition obtained.**

**i. Determine the extent of participation by small business, small disadvantaged business, and women-owned small business concerns under the program.**

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**Management Comments.** The Defense Logistics Agency concurred with all recommendations. Management stated that some of the analysis in the report was incomplete, as it did not capture all the costs and benefits incurred by the Navy. Items not considered included: improved fill rates, spot buy capabilities, reduced inventory, improved responsiveness and reallocated resources. Management also commented that using the mean acquisition unit cost plus 20 percent conflicted with using 80 percent of the standard unit price at a 50 percent markup. Management also commented that 2,309 of the 2,404 item prices submitted by Raytheon had been accepted and that the commercially priced items for North Island were in aggregate 62 percent of the FY 2000 standard unit price. Management also commented that if established metrics cannot be met, discontinuing the program should not be the only choice.

**Audit Response.** The Defense Logistics Agency comments are responsive. Regarding the incompleteness of our analysis, we do not agree that the program measurably increased fill rates at North Island, reduced inventory, or improved responsiveness and allowed for reallocation resources. As stated in the report, the bulk of the material supplied by Raytheon still came from the DLA supply system. In regard to the reallocation of resources, contractor resources previously procured by North Island were now included in the price of the program. Further, the mean acquisition unit cost plus 20 percent and 80 percent of the standard unit price with a 50 percent markup are the same. For example, if the mean acquisition unit cost was \$100 and a 20 percent markup was applied the amount would be \$120. Applying a 50 percent markup to the mean acquisition unit cost of \$100 would result in a standard unit price of \$150 then applying an 80 percent factor would also equal \$120. In regard to the prices for 2,309 commercially priced items, these represent new items placed on contract that had not been reviewed by our office. Based on our analysis of previous claims about commercial prices that favorably impact the program, we remain skeptical that the commercially priced items for North Island were in aggregate 62 percent of the FY 2000 standard unit price. The Defense Supply Center Philadelphia cost recovery rate for bench stock in FY 2000 was 57.2 percent. Therefore, 62 percent of the standard unit price would equate to 97.5 percent of the mean acquisition unit cost ( $\$100 \times 1.572 = \$157.2 \times .62 = \$97.5$ ). We found no evidence during the audit that the contractor was able to obtain sufficient bench stock material at prices lower than the Defense supply centers to support the statement. If established metrics cannot be met and if the program cannot demonstrate what was intended there would appear to be limited alternatives other than terminating the program.

2. **We recommend that the Director, Defense Logistics Agency, evaluate the metrics and milestones for the industrial prime vendor program and within the next 12 months determine whether program goals can be achieved and whether the program should continue.**

**Management Comments.** The Defense Logistics Agency concurred with the recommendation.

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## Appendix A. Audit Process

### Scope

**Work Performed.** We reviewed DLA procedures and support contract documentation issued by DSCP to Raytheon under IPV contract SPO500-98-D-BP01. Specifically, we reviewed contract billings from July 1999 through March 2000. We reviewed a total of 4,248 line items for commercial benchstock items valued at \$1.3 million. A total of 1,229 different NSNs were procured on the 4,248 line items. We reviewed DLA cost recovery rates for FY 1999 and FY 2000. Our review focused on whether the IPV program, when fully operational, is beneficial to NADEP North Island and DoD as a whole.

**Limitations to Scope.** The adequacy of the DLA management control program was addressed in Inspector General, DoD, Report No. 98-088, "Sole-Source Prices for Commercial Catalog and Noncommercial Spare Parts," therefore, we did not review it further.

**DoD-Wide Corporate Level Government Performance and Results Act (GPRA) Goals.** In response to the GPRA, the Secretary of Defense annually establishes DoD-wide corporate level goals, subordinate performance goals, and performance measures. This report pertains to achievement of the following goals, subordinate performance goals, and performance measures:

- **FY 2001 DoD Corporate Level Goal 2:** Prepare now for an uncertain future by pursuing a focused modernization effort that maintains U.S. qualitative superiority in key warfighting capabilities. Transform the force by exploiting the Revolution in Military Affairs, and reengineer the Department to achieve a 21st century infrastructure. **(00-DoD-2)**
- **FY 2001 Subordinate Performance Goal 2.3:** Streamline the DoD infrastructure by redesigning the Department's support structure and pursuing business practice reforms. **(00-DoD-2.3)** **FY 2001 Performance Measure 2.3.1:** Percentage of DoD Budget Spent on Infrastructure. **(00-DoD-2.3.1)**
- **FY 2001 Subordinate Performance Goal 2.4:** Meet combat forces' needs smarter and faster, with products and services that work better and cost less, by improving the efficiency of DoD's acquisition process. **(00-DoD-2.4)**

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**DoD Functional Area Reform Goals.** Most major DoD functional areas have also established performance improvement reform objectives and goals. This report pertains to achievement of the following functional area objectives and goals.

- **Acquisition Functional Area. Objective:** Foster Partnerships. **Goal:** Decrease paper transactions by 50% through electronic commerce and electronic data interchange. (ACQ-2.3)
- **Logistics Functional Area. Objective:** Develop a seamless logistics system. **Goal:** Improve the communication of logistics information (developing and implementing an integrated data environment to expand EDI, and enhance information exchange within DoD, with industry, other government agencies, and with allies. (LOG-2.2)

## Methodology

**Use of Computer-Processed Data.** We relied on computer-processed data from the Defense Supply Center Philadelphia and Raytheon to determine the audit scope. The computer-processed data were determined reliable based upon the significant number of contract items we reviewed and compared to the data output from DSCP. Although we did not perform a formal reliability assessment of the computer-processed data, we determined that the bin locations, quantities, order dates, and amounts generally agreed with the information in the computer-processed data. We did not find errors that would preclude use of the computer-processed data to meet the audit objectives or that would change the conclusions in the report.

**Audit Type, Dates, and Standards.** We performed this program audit from July 1999 through November 2000 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD.

**Contacts During the Audit.** We visited or contacted individuals within the DoD and Raytheon. Further details are available on request.

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## **Appendix B. Prior Coverage**

During the last 5 years, the General Accounting Office has issued four audit reports and the Inspector General, DoD has issued seven audit reports discussing either logistics response time or prices for spare parts in the Acquisition Reform environment.

### **General Accounting Office**

General Accounting Office, Report No. GAO-01-22 (OSD Case No. 2080), "Defense Acquisitions: Price Trends for the Defense Logistics Agency's Weapon Systems Parts," November 2000

General Accounting Office, Report No. NSIAD-00-30 (OSD Case No. 1920), "Opportunities Exist to Expand the Use of Defense Logistics Agency Best Practices," January 2000

General Accounting Office, Report No. NSIAD-00-21 (OSD Case No. 1868), "Management of Repair Parts Common to More than one Military Service can be Improved," October 1999

General Accounting Office, Report No. NSIAD-99-90 (OSD Case No. 1808), "DoD Pricing of Commercial Items Needs Continued Emphasis," June 1999

### **Inspector General, DoD**

Inspector General, DoD, Report No. D-2000-099, "Procurement of the Propeller Blade Heaters for the C-130 and P-3 Aircraft," March 8, 2000

Inspector General, DoD, Report No. D-2000-098, "Spare Parts and Logistics Support Procured on a Virtual Prime Vendor Contract," March 8, 2000

Inspector General, DoD, Report No. 99-217, "Sole-Source Commercial Spare Parts Procured on a Requirements Type Contract," July 21, 1999

Inspector General, DoD, Report No. 99-101, "Logistics Response Time for the Direct Vendor Delivery Process, Defense Supply Center, Columbus," March 4, 1999

Inspector General, DoD, Report No. 99-026, "Commercial Spare Parts Purchased on a Corporate Contract," October 30, 1998

Inspector General, DoD, Report No. 98-088, "Sole-Source Prices for Commercial Catalog and Noncommercial Spare Parts," March 11, 1998

Inspector General, DoD, Report No. 98-064, "Commercial and Noncommercial Sole-Source Items Procured on Contract N000383-93-G-M111," February 6, 1998

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## Appendix C. FAR Guidance on Competition and Requirement Bundling

**Competition.** Guidance on competition requirements is found in FAR 6.101, "Policy":

10 U.S.C 2304 and 41 U.S.C 253 require, with certain limited exceptions (see Subparts 6.2 and 6.3), that contracting officers promote and provide for full and open competition in soliciting offers and awarding Government contracts.

Contracting officers shall provide for full and open competition through the use of the competitive procedure(s) contained in this subpart that are best suited to the circumstances of the contract action and consistent with the need to fulfill the Government's requirements efficiently (10 U.S.C 2304 and 41 U.S.C 253).

**Requirement Bundling.** The FAR defines and provides detailed requirements for acquisitions involving bundling (effective July 26, 2000). FAR 2.101, "Definitions," defines bundling.

"Bundling" means —

(1) Consolidating two or more requirements for supplies or services, previously provided or performed under separate smaller contracts, into a solicitation for a single contract that is likely to be unsuitable for award to a small business concern due to—

(i) The diversity, size, or specialized nature of the elements of the performance specified;

(ii) The aggregate dollar value of the anticipated award;

(iii) The geographical dispersion of the contract performance sites; or

(iv) Any combination of the factors described in paragraphs (1)(i), (ii), and (iii) of this definition.

(2) "Separate smaller contract" as used in this definition, means a contract that has been performed by one or more small business concerns or that was suitable for award to one or more small business concerns.

(3) This definition does not apply to a contract that will be awarded and performed entirely outside of the United States.

FAR Part 7—Acquisition Planning, provides detailed requirements for acquisitions involving bundling.

### **7.107 Additional requirements for acquisitions involving bundling.**

(a) Bundling may provide substantial benefits to the Government. However, because of the potential impact on small business

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participation, the head of the agency must conduct market research to determine whether bundling is necessary and justified (15 U.S.C. 644(e)(2)). Market research may indicate that bundling is necessary and justified if an agency would derive measurably substantial benefits (see 10.001(a)(2)(iv) and (a)(3)(vi)).

(b) Measurably substantial benefits may include, individually or in any combination or aggregate, cost savings or price reduction, quality improvements that will save time or improve or enhance performance or efficiency, reduction in acquisition cycle times, better terms and conditions, and any other benefits. **The agency must quantify the identified benefits and explain how their impact would be measurably substantial. [emphasis added]** Except as provided in paragraph (d) of this section, the agency may determine bundling to be necessary and justified if, as compared to the benefits that it would derive from contracting to meet those requirements if not bundled, it would derive measurably substantial benefits equivalent to—

(1) Ten percent of the estimated contract value (including options) if the value is \$75 million or less; or

(2) Five percent of the estimated contract value (including options) or \$7.5 million, whichever is greater, if the value exceeds \$75 million.

(c) Without power of delegation, the service acquisition executive for the military departments, the Under Secretary of Defense for Acquisition, Technology and Logistics for the defense agencies, or the Deputy Secretary or equivalent for the civilian agencies may determine that bundling is necessary and justified when—

(1) The expected benefits do not meet the thresholds in paragraphs (b)(1) and (b)(2) of this section but are critical to the agency's mission success; and

(2) The acquisition strategy provides for maximum practicable participation by small business concerns.

(d) Reduction of administrative or personnel costs alone is not sufficient justification for bundling unless the cost savings are expected to be at least 10 percent of the estimated contract value (including options) of the bundled requirements.

(e) Substantial bundling is any bundling that results in a contract with an average annual value of \$10 million or more. When the proposed acquisition strategy involves substantial bundling, the acquisition strategy must—

(1) Identify the specific benefits anticipated to be derived from bundling;

(2) Include an assessment of the specific impediments to participation by small business concerns as contractors that result from bundling;

(3) Specify actions designed to maximize small business participation as contractors, including provisions that encourage small business teaming;

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(4) Specify actions designed to maximize small business participation as subcontractors (including suppliers) at any tier under the contract or contracts that may be awarded to meet the requirements; and

(5) Include a specific determination that the anticipated benefits of the proposed bundled contract justify its use.

(f) The contracting officer must justify bundling in acquisition strategy documentation.

(g) In assessing whether cost savings would be achieved through bundling, the contracting officer must consider the cost that has been charged or, where data is available, could be charged by small business concerns for the same or similar work.

(h) The requirements of this section, except for paragraph (e), do not apply if a cost comparison analysis will be performed in accordance with OMB Circular A-76.



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## **Appendix D. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition, Technology, and Logistics  
Deputy Under Secretary of Defense (Acquisition Reform)  
Deputy Under Secretary of Defense (Logistics and Material Readiness)  
Director, Defense Procurement  
Under Secretary of Defense (Comptroller/Chief Financial Officer)  
Deputy Chief Financial Officer  
Deputy Comptroller (Program/Budget)

### **Department of the Army**

Auditor General, Department of the Army

### **Department of the Navy**

Naval Inspector General  
Auditor General, Department of the Navy  
Commanding Officer, Fleet Industrial Supply Center, San Diego  
Commanding Officer, Naval Aviation Depot, Cherry Point  
Commanding Officer, Naval Aviation Depot, North Island

### **Department of the Air Force**

Assistant Secretary of the Air Force (Acquisition)  
Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Auditor General, Department of the Air Force

### **Other Defense Organizations**

Director, Defense Contract Audit Agency  
Director, Defense Contract Management Agency  
Director, Defense Logistics Agency

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## **Other Defense Organizations (cont'd)**

Commander, Defense Supply Center Columbus  
Commander, Defense Supply Center Philadelphia  
Commander, Defense Supply Center Richmond

## **Non-Defense Federal Organizations**

Office of Management and Budget  
Office of Federal Procurement Policy

## **Congressional Committees and Subcommittees, Chairman and Ranking Minority Member**

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on Defense, Committee on Appropriations  
House Committee on Armed Services  
House Committee on Government Reform  
House Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations, Committee on Government Reform  
House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform  
House Subcommittee on Technology and Procurement Policy, Committee on Government Reform

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# Defense Logistics Agency Comments



DEFENSE LOGISTICS AGENCY  
HEADQUARTERS  
8725 JOHN J. KINGMAN ROAD, SUITE 2533  
FORT BELVOIR, VIRGINIA 22060-6221

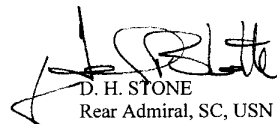
FEB 16 2001

IN REPLY  
REFER TO J-3

MEMORANDUM FOR DDAI

SUBJECT: Industrial Prime Vendor Program at the Naval Aviation Depot – North Island  
Project No. 9CF-0104

As requested in your memorandum dated December 10, 2000, attached are J-3's comments on the subject report.

  
D. H. STONE  
Rear Admiral, SC, USN  
Director  
Logistics Operations

Attachment



DEFENSE LOGISTICS AGENCY  
HEADQUARTERS  
8725 JOHN J. KINGMAN ROAD, SUITE 2533  
FORT BELVOIR, VIRGINIA 22060-6221

IN REPLY  
REFER TO J-33

MEMORANDUM FOR OFFICE OF CHIEF OF STAFF, ATTN: CHARLENE MANN

THROUGH: J-33

SUBJECT: Proposed Audit Report, Project No. D199CF-0104

The subject report has been received in J-335 for "...comments and a statement of corrective actions to be taken." Comments and recommendations of J-335 are attached.

PETER F. RUNFOLA  
Chief, Acquisition Programs Division  
Acquisition Management

Attachment:

Federal Recycling Program



Printed on Recycled Paper

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We have reviewed the Audit Report on the Industrial Prime Vendor Program (IPV) at Naval Aviation Depot – North Island (Project No. D1999CF-0104) and submit the following comments:

**GENERAL COMMENTS:**

The IPV program was designed as a test program to explore innovative logistics solutions for providing spare parts used in maintenance, repair and overhaul facilities. A Class Justification for Other than Full and Open Competition was approved to award a limited number of site-specific contracts for proof of concept. As performance progresses on initial contracts, metrics will be gathered to assess the impact to total logistics cost and readiness posture at the specific sites. The test period is 5 years. The first 2 years are transition from Government performance to contractor performance. Years 3 through 5 are to be fully implemented support provided by the contractor.

The present DLA logistics support system for benchstock items will be prudently maintained concurrently with the IPV initiative. The intention is to assess performance and determine industry's ability to support benchstock primarily using a commercial supply chain through the test period. Meanwhile, acquisition plans are being developed incorporating program enhancements, for converting to a fully competitive environment targeting consolidated requirements based on common customer missions and/or weapon system complements. Upon award, the concurrent systems will become redundant and require adjustment in the scope of function.

The program is on pace with the original test plan. This audit was conducted during the 18 to 24-month phase of the test. Given the 5-year test plan, we believe a proper assessment of the overall program objectives cannot be made at this time. Additionally, the value of related benefits including operational efficiencies, fewer down hours, reduced repair time, etc., have not been considered in this audit.

We concur that the ratio of commercial sales to DLA sales must be sufficient to achieve a cost effective program. In fact, our actual baseline assessment is almost identical to the recommendation in the report, "If the DSCP cost recovery rate (CCR) was 50 percent, the IPV program could break even or better at 80 percent of SUP when sales reach about \$4 million." The only difference is that DSCP used the established DLA CRR, of approximately 58 percent, not a 50 percent CRR. The primary cause of the low rate of commercial sales is the segmented requirements, that is the site specific quantities are not sufficient to result in materiel prices comparable to those in the DLA wholesale system. Since DSCP did not want to increase overall costs to the customer, DSCP chose to continue to rely on the DLA system for these items. DSCP has taken steps to remedy this situation.

In May 2000, DSCP simultaneously exercised the option for years 3 through 5 of the contract. This allows Raytheon to negotiate prices based on a 3-year estimated quantity instead of a single year. This has produced prices that are more effective than those for single year requirements.

Additionally, DSCP is pursuing an amendment to the original approved acquisition method to incorporate worldwide demand for items where the IPV site is the majority user. This will allow Raytheon to negotiate prices on quantities commensurate with the DLA wholesale system and should result in improved prices.

DSCP is also developing a plan for new contracts, referred to as IPV Generation II. This program will provide the same level of service as the original program, but will incorporate worldwide requirements in order to achieve effective prices. Additionally, the program will be rolled out to a larger customer base, grouped by common weapon system/mission. This will also allow fixed

costs to be spread among a larger group of customers, thus reducing the material management fee rate for the customer.

**Comments to recommendations**

*1.a. Perform periodic reviews to determine whether parts usage established during contract pricing, agrees with actual usage, when using market baskets.*

**DLA COMMENTS:** Concur with clarification.

DSCP did not rely on planned quantities to set item prices. The variability in the usage of these items, based on the program maintenance performed, makes it extremely difficult to develop an accurate "planned" quantity for a given period. Moreover, the data necessary to develop planned quantities for these items does not exist because of the limited accountability of the customer's tracking system. This level of accountability for benchstock material is consistent with DoD industrial activities. Therefore, the initial contract estimated quantities were based on the actual (i.e. historical) NADEP-NI demand recorded in the DLA system from FY 95-97, and the first 2 quarters of FY 98. This is the same data upon which the DLA wholesale system computations are based and reflects historical demand variability. This situation improves with full transition of supply chain management responsibility to the contractor.

Since the inception of the program, periodic reviews of actual item usage against contract prescribed quantities are performed and items are re-priced using revised demand. This "cost driver" process allows prioritization in pricing efforts for priced (i.e. re-pricing based on increased demand) and the remaining un-priced items. However, as presented in the table below, there is significant demand variability with these items. Actual usage cannot be accurately predicted but, using a market basket pricing method that periodically resets cost drivers, will contribute to mitigating the effect of this variability on overall program costs.

**NADEP NI Demand Variability**

May '00	584 PEB items (baseline)	
Jun '00	902 PEB items	193 or 33% item match w/ May
Jul '00	461 PEB items	180 or 30 % item match w/ May
Aug '00	513 PEB items	96 or 16 % item match w/ May
Sep '00	763 PEB items	175 or 29 % item match w/ May

Table: The above figure illustrates for NADEP NI the demand variability of benchstock requirements in June through September 2000 that match the 584 items required in May.

Additionally, a statistical model is being developed to ascertain the level of price risk for a given population of items priced against a benchmark. This model provides indication of the likelihood the program costs will break even for the selected priced items.

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*1.b. Instruct Raytheon to correct pricing errors on proposals before a determination is made to place items on contract.*

**DLA COMMENTS:** Concur and completed.

Upon conducting a full pricing analysis, errors were discovered. The pricing analysis process was reviewed and deemed adequate. Concurrently, Raytheon determined that an unapproved supplier submitted these faulty prices. These prices were omitted from consideration and contract modification P00020 accepted only 491 item prices. Raytheon removed this source from their supplier base and subsequently implemented procedures to provide greater oversight of supplier pricing prior to submission to DSCP.

*1.c. Use an Appropriate cost recovery rate for benchstock material in the 45 to 50 percent range when decisions are made to place items on contract and for program evaluation purposes.*

**DLA COMMENTS:** Concur with exception.

Pricing evaluation:

We agree with using an appropriate cost recovery rate (CCR) for benchstock material. We do not agree, however, with the adjusted cost recovery rates stated. CRRs are developed annually based on customary procedures established within DLA. The components of a Standard Unit Price (SUP) consist of material acquisition unit cost (MAUC) plus the established CRR. IPV item pricing targets were based on SUPs at the time of award. However, based on the discussions with the DoD IG audit team, DSCP has continued to use the FY 00 SUP for pricing analysis occurring in FY 01.

Program evaluation:

General:

It is not appropriate to select CRRs for the break-even point analysis, inconsistent with the actual rates for these commodities. The lowest actual benchstock CRR cited in the report is 57 percent (FY 00), yet the highest CRR used in the recommended break-even point analysis is 50 percent. It would be useful to show the break-even point analysis at a 60 percent CRR. This is far less than the disputed FY 01 rate but in line with FY 00 and a preliminary estimate of the FY 02 rate.

Program cost effectiveness was based on the information available at the time of award. A subjective adjustment at this point in the program is not appropriate. Therefore, the adjusted FY 01 CRR/SUP developed in this report is not an appropriate data point. However, due to the exceptional impact of DRMS costs on the CRR for FY 01, and the fact that we do not anticipate this cost will be incurred in FY 02, when developing future program benchmarks, we will consider developing an adjustment to FY 01 SUPs to reflect a CRR more in line with actual and anticipated rates. It is important to note, however, that IPV customers would be charged FY 01 CRR for this material. Yet, for program comparison purposes, the FY 00 CRR is used showing IPV less favorably.

Market Basket Comparison:

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Although agreed to by NADEP North Island and DSCP, the information in Figure 4, July 1999 Market Basket Comparison, of this report is skewed. The amount for "oversight" should be \$8,166 as agreed to by DSCP and NADEP-NI. Despite this agreement, it can be contested that the costs associated with "oversight" are overstated and the costs associated with North Island/DLA infrastructure are understated. They do not accurately account for the associated full activity based costs and bias the Market Basket Comparison against the IPV program.

We believe this analysis is still incomplete, as it does not capture all the costs and benefits incurred by NADEP NI/FISC-SD. Related benefits that must be considered include: improved fill rates, spot buys capability, reduced inventory investment, improved responsiveness, reallocated resources.

*1.d. Establish metrics that compare the Defense Logistics Agency mean acquisition unit cost with industrial prime vendor contract costs and not place items on contract if costs exceed 120 percent of the mean acquisition unit cost.*

**DLA COMMENTS:** Concur with exception.

This recommendation citing MAUC plus 20 percent conflicts with recommendation 1.c., which suggests using SUP with a 50 percent markup. Regardless, setting a benchmark for comparing prices before being placed on contract is appropriate. The recommended benchmark for accepting prices of 120 percent of the DLA MAUC is inconsistent with actual information under the IPV program and data used by the IG elsewhere in this report. A 20 percent markup is inappropriate considering it was reported Raytheon's markup on MAUC prices is approximately 27.2 and 28.3 percent in FY 99 and FY 00 respectively. This rate is similar to those from other IPV contractors.

Additionally, the Government does not possess data to accurately adjust MAUC to reflect the price elasticity between wholesale and retail quantities, nor is this readily available in industry. The SUP is a more appropriate basis for developing the Government estimate because it represents the full range of IPV support including, acquisition, material management, storage/distribution and transportation. Further, when combined with the customer's material management costs, the result is the best Government estimate of the net landed cost.

The statement in the report "DSCP added items to the contract without regard to individual unit prices if the market baskets met the 80 percent criteria" is not correct. For example, 2,309 of the 2,404 item prices submitted by Raytheon have been accepted. In fact, currently the commercially priced items for NI are in aggregate 62 percent of the FY 00 SUP. Please note that the FY 00 versus FY 01 SUP, which is what IPV customers would have to pay for this material if ordered directly from DLA, is being used. If the balance of the prices submitted by Raytheon were added, the aggregate rate against SUP would still be at 79.7 percent, below the benchmark of 80 percent. However, these items have not been added because it was determined that the price, while deemed fair and reasonable, exceeds the SUP by an amount so great that it is not practical to shift to commercial support at this time. Additionally, if the actual usage of the items exceeds



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the estimates, the overall cost of the program to the customer could increase beyond an acceptable range. In these cases, the alternative use of DLA inventory is selected.

The price evaluation process employs a filter that sets aside prices that exceed 125 percent of SUP or are 25 percent or less of SUP for further analysis. After a complete review, only items with acceptable prices are aggregated into the existing priced population and the overall rate against SUP is recomputed.

*1.e. Obtain a full refund from Raytheon for overcharges and take steps to reimburse North Island for the full amount of the contract over billings.*

**DLA COMMENTS:** Concur.

NADEP NI has received reimbursement for over billings on invoice numbers 7 through 15. Remaining reimbursement action against invoice numbers four through six is being coordinated with the DoD IG audit team prior to disbursing to NADEP NI.

*1.f. Establish program metrics for benchstock material that show a significant shift in the number of transactions supplied from its depot system to industry, establish time frames to attain the metrics, and if unable to achieve the established metrics, discontinue the program.*

**DLA COMMENTS:** Concur with exception.

IPV program metrics with commensurate time frames are being revised. Program Management Reviews are conducted to assess performance against prescribed goals. If established metrics cannot be met, discontinuing the program should not be the only choice. Continuing the program with revisions may be appropriate.

The original IPV concept estimated the number of transactions that would shift to industry. It must be noted, however, the original concept was limited to a very small number of customer sites and to only a portion of their requirements. Therefore, the impact on the overall DLA system was not expected to be significant. However, upon transition to the next level of IPV support, i.e., Generation II, a greater shift to industry is anticipated. DSCP intends to accomplish this in segments. In DSCP's proposed Phase I plan, existing contracts will be modified to support the worldwide demand for small population of items. In the proposed Phase II plan, contracts will be competitively negotiated using consolidated (i.e., worldwide) requirements based on common customer missions and/or weapon system.

The fact that DSCP, as stated in the report, "did not institute a solution that effectively reduced the DLA supply system infrastructure and depot operations costs" should not be considered a failure of IPV. Only after the test is concluded and a determination that the program is viable will robust efforts be made to reduce DLA infrastructure.

*1.g. Develop a plan, establish metrics and time frames, and demonstrate how industry will support benchstock material for the bulk of its customers and transactions to continue the program.*

**DLA COMMENTS:** Concur.

IPV program metrics with commensurate time frames are being revised. DSCP is currently developing IPV, Generation II, which incorporates features including, world-wide demand for covered items and support for broader customer groups, to overcome the fundamental limitations imposed in the original concept.

*1.h. Determine the impact the program will have on competition and monitor the extent of competition obtained.*

**DLA COMMENTS:** Concur.

At time of award, all acquisition regulatory requirements were met. Raytheon's Small Business plan was evaluated and was a part of the selection criteria. Under IPV contracts, Raytheon performs as the supply chain integrator establishing partnerships with the various industry segments. Currently, Raytheon has established partnerships with approximately 75 suppliers and reports small business participation in accordance with the subcontracting plan provision in the contract. Future IPV acquisitions will also comply with all procurement regulations and will be monitored for participation by small business, small disadvantaged business, and women-owned small business concerns.



*1.i. Determine the extent of participation by small business, small disadvantaged business, and women-owned small business concerns under the program.*


**DLA COMMENTS:** Concur. See comment provided to 1.h. above.

*2. We recommend that the Director, Defense logistics Agency, evaluate the metrics and milestones for the industrial prime vendor program and within the next 12 months determine whether program goals can be achieved and whether the program should continue.*

**DLA COMMENTS:** Concur with exception.

DSCP will provide a program overview to the Director, DLA within the next 12 months. The decision to continue should be made in accordance with the original test plan and after sufficient performance has occurred, to properly assess the program. Regardless, through the remainder of the test or contract term, program management reviews will be conducted to monitor program goals.

COORDINATION: J-335  J-33(Ashman) 

Approved By: William J. Kenny 

Action Officer: Paul Sabatini/Philip B. Clark, J-335, February 8, 2001

## **Audit Team Members**

The Contract Management Directorate, Office of the Assistant Inspector General for Auditing, DoD, prepared this report. Personnel of the Office of the Inspector, DoD, who contributed to the report are listed below.

Paul J. Granetto  
Terry L. McKinney  
Henry F. Kleinknecht  
Shawn L. James  
Joseph P. Bucsko  
Nicole A. Lukacs